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SCIENTIFIC COMMUNICATION

I wish to present a paper

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Abstract

RESEARCH ON THE CONTENT OF CADMIUM IN TOBACCO AND ITS TRANSFER TO THE PARTICULATE PHASE OF S M O K E

The cadmium contents have been measured by AES-inductively coupled plasma on four varieties of tobacco types, on six varieties of cigarette types and their respective cigarette smokes. The tobaccos were of the 1981 harvest while the cigarettes were produced with these tobaccos at the beginning of 1982. The method of meysurement, AES-inductively coupled plasma, is accurate and fast with very low detection limits, and in this respect it is only comparable with neutron activation analysis.
The cadmium content in flue cured tobaccos was found to be in the range 1,130 to 7,55 ug/g. The transfer of cadmium from tobacco to the mainstream particulate phase was in the range from 8,7 to 16,2 %, an average of 12,45 %.
The leveles of cadmium in Burley tobaccos were found to lie in the range from 2,590 - 3,49 ug/g. The transfer of cadmium from tobacco to the mainstream particulate phase was 13,6 %.
The cadmium content in the Herzegovina tobacco type was found to be in the range from 4,170 - 4,480 ug/g. The cadmium content of particulate matter from the same tobaccos was in the range from 0,513 to 0,781 ug/g, (transfer 15,1 %).
The values obtained for cadmium contents of oriental tobaccos were found to lie in the range from 1,540 to 2,660 ug/g. The cadmium content of the particulate phase of smoke was in the range from 0,140 - 0,399 ug/g (transfer 11,8 %).
The given results are adequate to the results obtained by researchs of tobacco conducted in the USA, Japan and Canada.
The levels of cadmium in the examined cigarettes were determined to lie within the range from 2,880 to 3,96 ug/cig. The transfer of cadmium from the cigarette tobacco to the mainstream particulate phase was in the range from 3,47 to 15,88 % (average 13,47%).

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Source: https://www.industrydocuments.ucsf.edu/docs/grgm0000